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Forage News

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11-2008

## Forage News [2008-11]

Department of Plant and Soil Sciences, University of Kentucky

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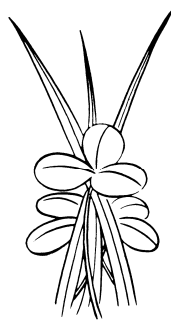
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### Repository Citation

Department of Plant and Soil Sciences, University of Kentucky, "Forage News [2008-11]" (2008). *Forage News*. 112.

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# FORAGE NEWS

For more forage information, visit our UK Forage Extension Website at: <http://www.uky.edu/Ag/Forage>

## November 2008

*Garry D. Lacefield and S. Ray Smith, Extension Forage Specialists • Christi Forsythe, Secretary*

### KFGC AWARDS

The Kentucky Forage and Grassland Council presented their annual awards at the 9<sup>th</sup> Kentucky Grazing Conference in Lexington on October 23. This is always a "highlight" for me to see most deserving, dedicated forage workers honored. Award recipients for 2008 were:

Producer – Todd Clark  
Industry – Jeff Medlin  
Public (County) – Chris Milam  
Public (State) – Ray Smith

Congratulations Todd, Jeff, Chris and Ray!

### CLAYTON GERALDS WINS KFGC FORAGE SPOKESMAN CONTEST

Clayton Gerald was the winner in the KFGC Forage Spokesman contest held in Lexington during the Kentucky Grazing Conference on October 23. Clayton will represent Kentucky at the National Contest in Grand Rapids, Michigan in June 2009.

Clayton Gerald and his son Chris run a commercial hay farm in Hart County near Munfordville, Kentucky. His total farm size is 560 acres, 300 of which are leased. The focus of his operation is producing small square bales for the horse market. Clayton currently grows a range of forage species including 400 acres of alfalfa and alfalfa/orchardgrass and 150 acres timothy, orchardgrass, and teff. On average he puts up 70,000 small square bales a year. Clayton is one of best hay producers in the state and last year won the Charlie Schnitzler Producer Award at the 28<sup>th</sup> Annual Kentucky Alfalfa Conference. In his presentation Clayton will overview the storage facilities that he has constructed over the years on his hay operation. He will also explain the yield expectations he has for the farm each year, the input requirements for growing top quality horse hay, and Clayton will provide an overview of the forage quality expectations of his clients.

### 29<sup>TH</sup> ALFALFA CONFERENCE PROGRAM SET

The Program committee for the Kentucky Alfalfa Conference has put together another great program for the 29<sup>th</sup> consecutive year. The program features leading Kentucky speakers covering cutting edge issues facing Kentucky's Alfalfa Industry. In addition, we are delighted to announce that Dr. Dennis Hancock, Extension Forage Specialist at the University of Georgia and Dr. Dennis Gehler, Alfalfa Product Manager, Croplan Genetics will be our two keynote speakers. We expect a full house of exhibitors and our largest Silent Auction ever. One of the highlights for me is the Hay Awards and Alfalfa Awards both of which will be presented after lunch. The complete program is on our website at <http://www.uky.edu/Ag/Forage/29th%20KAC%20program%20columns.pdf>. If you have questions, contact me at [glacefie@uky.edu](mailto:glacefie@uky.edu) or by phone at 270-365-7541, Ext. 202; Christi at [cforsyth@uky.edu](mailto:cforsyth@uky.edu) or 270-365-7541, Ext. 221.

### FORAGES AT KCA

Dave Maples and all the fine folks at KCA are finalizing plans for the annual Kentucky Beef Cattle Association Convention to be held in Lexington January 8-10. We have finalized the program for this years'

"Forages at KCA" program. The program will begin at 2:00 on January 9 at the Lexington Convention Center. We will feature Mr. Barry Drury the National Forage Spokesman as our keynote speaker. In addition to Barry's presentation, other speakers will cover clover varieties, weed control, Teff and extending the grazing season. Program and speakers include:

2:00 p.m. Welcome – Dr. Garry Lacefield  
2:10 How I use Forages - Mr. Barry Drury, National Forage Spokesman  
2:30 Selecting Clover Varieties Wisely - Dr. Ray Smith  
3:00 Weed Control Options for Pastures - Mr. Jon Doran  
3:30 Teff: What is it? Where does it fit in Kentucky - Mr. Bret Winsett  
4:00 Extended Grazing & Reducing Stored Feed Need - Dr. Garry Lacefield  
4:30 Adjourn

A proceedings, along with other forage-related information, will be available.

### 9<sup>TH</sup> GRAZING CONFERENCE PROCEEDINGS

We have added the proceedings for our 9<sup>th</sup> Kentucky Grazing Conference held October 23, 2008, to our website. If you weren't able to attend and would like to review the material covered, visit <http://www.uky.edu/Ag/Forage/9th%20proceedings%2010-08.pdf>.

### DECISION AID ADDED TO WEBSITE

We have just added another "Decision Aid Tool" to our website. Value of fertilizer nutrients in hay was developed by Dr. Dan Undersander, Extension Forage Specialist at the University of Wisconsin. See <http://www.uky.edu/Ag/Forage/Forage%20Decision%20Aids.htm> for more details.

### ENOUGH HAY....

Following the severe drought of 2007, many Kentucky producers vowed not to let themselves get caught short of hay again. So, most cattle producers (and hay makers as well) baled up as much hay as they possibly could in the early summer of 2008. Frequent rains in May and June made harvesting and baling a real challenge. However, the weather turned dry in July and a lot of late cutting tall fescue hay was baled later that month. It is good that producers got the hay made but surely the quality had suffered with such a late cutting. Kentucky cattle producers would be well advised to have their hay tested by the Kentucky Department of Agriculture to measure exactly what the quality of their hay is and formulate rations accordingly.

Compounding the problem is the fact that many cattle producers had to start feeding hay in August and because of the lack of rain most, if not all, will have to continue to feed right into March of 2009. What seemed like "enough hay" early on may in fact turn out to be another "short" year for hay. Hay testing and ration balancing are key tools to stretch hay supplies and assure that those cattle's nutrient requirements are being met.

You can contact the Kentucky Department of Agriculture at 1-800-248-4628 and schedule an appointment to have them come to your farm and TEST your hay. (SOURCE: Tom Keene, UK Extension Hay Marketing Specialist)

## ANIMAL GRAZING HABITS

Grazing ruminants have 3-5 major 'meals' throughout the day (with mini grazing bouts in between the major meals), with the largest meal in the evening and the second largest meal in the early morning. Cattle, sheep and goats are prey animals that evolved to consume large quantities of high-fiber feeds in a relatively short time (often in open meadows where they were more prone to predation), then find a safe place to lie down and further chew (ruminant) their food. Ruminant animals typically lie down after dusk and remain relatively still during the night unless disturbed. After chewing cud much of the night, their rumens have emptied substantially. In the UK work, the morning meal tended to consist of primarily clover. (SOURCE: *PFGC News*, Vol. 18, #4, Fall 2008)

## TIME TO FOCUS ON SWITCHGRASS ECONOMICS

Heaps of studies have been completed on growing a better switchgrass plant for use in making cellulosic ethanol. Economists at North Dakota State University say what's needed now is more research focusing on the economic factors — fertilizer costs, changes in traditional crop prices, yield increases, etc. — that will influence the willingness of producers to grow the crop for use as a biofuel. In one recent study, Larry Leistritz, Dean Bangsund and Eric DeVuyst from NDSU's department of agribusiness and applied economics, estimated breakeven prices required to cover switchgrass production expenses and provide for the same level of net return as from traditional crops. They concluded that to break even with traditional crops, switchgrass producers would need to receive \$47/ton on low-productivity soil, \$67/ton on average soil and \$76/ton on highly productive soil. (SOURCE: *eHay Weekly*, October 7, 2008)

## LIMITING ACCESS TIME TO HAY CAN STRETCH THE ROLL

Researchers at Purdue investigated restricting cow access to hay. When mature cows were allowed access to hay for 4, 8, 12, or 24 hours, hay disappearance which includes both hay waste and consumption was decreased with reduced access time. Body weight change did not differ between 8, 12 or 24 hours of access while restricting access to only 4 hours resulted in decreased weight gain over the 50 day trial. For mature cows, to maintain body weight gain in this trial, restricting access to only 8 hours was adequate.

Restricting access time to hay resulted in a linear decrease in body weight gain in young, second calf cows. Keep in mind that these young cows are still growing to reach their mature size and have greater nutrient requirements during the dry period than older, mature cows. In this work, restricting access to hay to 8 hours reduced hay disappearance by approximately 15% while not effecting weight change/gains. Restricting time further to only 4 hours resulted in reduced intakes but also impacted cow body weight gain and this is not ideal for thin, mature cows needing to regain body condition score or young, growing cows. Reducing time access to hay may restrict growth and body condition impacting future production and these younger and thinner cows should be sorted from the herd and managed separately if this strategy is to be employed.

Need more proof that this works? Recently, researchers at the University of Illinois reported findings from a similar trial involving restricting access time to hay. Two trials were conducted lasting 87 and 89 days using third trimester Simmental cows. Access to hay in this study was ad libitum (free-choice), 9, 6 or 3 hours. Hay disappearance decreased from 34 lbs of dry matter for free choice cows to approximately 18 lbs for cows having only 3 hours of hay access. Hay waste was similar and averaged 32% and calculated hay intake was reduced from 21 lbs of dry matter to 12 lbs. Cow body weight gains were 94, 87, 73 and 54 lbs for free-choice, 9, 6 and 3 hour access, respectively. Body condition score changes followed similar trends to weight changes with cows maintaining body condition with an increase of 0.1 body condition score when cows had only 3 hours of access to hay.

In the second trial conducted by University of Illinois researchers, hay access was restricted to 6 or 9 hours. Again, hay disappearance decreased as access time was limited decreasing by 13% and 17% in comparison to free-choice for 9 and 6 hours of access. Hay waste was lower in this trial averaging 14%. Body weight and body condition score changes were not impacted by restricting hay access in this trial.

These trials indicate that when forage supplies are tight or for producers looking to reduce annual cow costs associated with stored feeds, restricting the time that cows have access to hay can reduce hay disappearance by approximately 15% with little impact on animal performance. Depending upon forage quality, cow body condition

score and environmental stress, hay savings may be even greater if time restriction is reduced to 3-4 hours. However, it is not recommended that access be restricted for developing replacement heifers, lactating females, young or thin cows as this may impact future productivity. Additionally, the degree of restriction will be influenced by the quality of the hay. If you are considering this hay saving strategy, it is advised that you test your forages. For information on this and other related topics, contact your local county extension agricultural agent. (SOURCE: *Jeff Lehmkuhler*, UK Beef Extension Specialist)

## HORSE GASTRIC ULCER SYNDROME CAN BE CONTROLLED WITH DIET

A change in diet can be good for what ails you — even if you are a horse.

Research from Texas A&M University showed that feeding alfalfa to horses that have the potential to be high performers either prevented or was therapeutic in treating stomach ulcers.

"Something in alfalfa hay tends to buffer acid production," said Dr. Pete Gibbs, Extension horse specialist.

Thirty percent of the 1 million horses in Texas are used in racing, showing and competitive performance, Gibbs said.

Up to 90 percent of racehorses and more than 50 percent of arena performance horses have ulcers of varying severity, he said.

When they have ulcers, horses "don't eat as well, work as well and don't feel as good," Gibbs said.

Feeding grain, confinement, exercise and overall environmental stress factors are thought to cause ulcers, he said. Studies have shown that horses will heal if provided less acidic diets.

The recent research project in the department of animal science's equine science program was part of Travis Lybbert's master's degree thesis in collaboration with the College of Veterinary Medicine. Gibbs served on Lybbert's academic research committee.

In the research, 24 quarter horses from 12-16 months old were separated into two treatment groups. One group was fed Bermuda grass hay and the other fed alfalfa hay to meet the daily roughage needs. The yearlings received forced exercise during the study.

The horses were examined internally with an endoscope at the beginning and end of two 28-day trials.

It's commonly thought that horses turned out on pastures are better off than those that are confined. However, if grass hay is the only hay they are fed, horses can still get gastric ulcers, he said.

In this study, ulcer scores increased when alfalfa was removed from the horses' diets, and they were turned out on pasture. Under the ulcer-scoring system, 0 signified no ulcers, with severity increasing to level 4.

Horse owners — especially those with performance horses — have one of two options, Gibbs said.

They can give their horses a pharmaceutical product that will decrease acid production, he said. Or they can manage horses' diets.

The second option does not stop acid production but offers buffering capabilities, Gibbs said. Further work is needed to look at horses with varying degrees of ulceration in order to better determine the full extent to which alfalfa or alfalfa-based products might help from a feeding management standpoint.

"Based on what we know right now — for horses that are kept in confinement, eating feed and getting forced exercise — it makes sense to consider some alfalfa as part of their diet," he said.

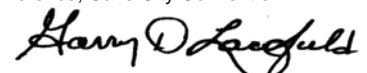
Until further research is done, he recommends, horses weighing between 1,000-1,300 pounds should be fed about 1 pound of alfalfa after a grain meal.

This isn't the first research conducted on gastric ulcers in horses, but it lays the groundwork for further research at Texas A&M, Gibbs said. The next study will investigate what it is about alfalfa and alfalfa products that lessens the occurrence and severity of horses' ulcers. (SOURCE: *Texas A&M Ag. Communications AgNews*, Dec. 13, 2007)

## UPCOMING EVENTS

### 2009

- |           |   |
|-----------|---|
| JAN 6     | Kentucky Small Ruminant Grazing Conference, Fayette County Extension Office |
| JAN 8-10  | Kentucky Cattlemen Association Annual Meeting, Lexington                    |
| JAN 9     | Forages at KCA, Lexington   |
| JAN 21-22 | Heart of America Grazing Conference, Columbus, IN                           |
| FEB 19    | 29 <sup>th</sup> Kentucky Alfalfa Conference, Cave City Convention Center   |



Garry D. Lacefield  
Extension Forage Specialist  
November 2008